

SECTION 16132

SURFACE NONMETALLIC RACEWAYS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Surface Non-Metallic Raceways.
- B. Fittings.
- C. Device Brackets and Plates.
- D. Cover Brackets and Face Plates.
- E. Communications Devices and Accessories.
- F. Electrical Devices.

1.2 RELATED SECTIONS

- A. Sections of Division 16 affected by, or affecting, construction activities of this section.

1.3 REFERENCES

- A. National Electrical Code.
- B. UL 94 - Tests for Flammability of Plastic Materials for Parts in Devices and Appliances; Underwriter's Laboratories, Inc.

1.4 SYSTEM DESCRIPTION

- A. Performance Requirements:
 - 1. Surface non-metallic raceway for dry interior locations, conforming to National Electrical Code, Article 352, Part B.
 - 2. System components listed by Underwriter's Laboratories, Inc., exhibiting non-flammable, self-extinguishing characteristics when tested in accordance with UL 94, V-0.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.

- B. Product Data: Manufacturer's descriptive literature for each system component specified in this section.
- C. Shop Drawings: Indicate raceway layouts, each system component required for complete system, raceway lengths, device types, locations; identify all circuits.
- D. Quality Assurance Submittals:
 - 1. Test Reports: Certified reports from independent testing laboratory supporting compliance of raceway system to specified requirements.
 - 2. Manufacturer's instructions: Printed installation instructions for each system component; include storage requirements.
- E. Closeout Submittals: If variations from approved shop drawings occur during installation of raceway system, submit final as-built drawings indicating such variations.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products of this section in manufacturer's unopened packaging until installation.
- B. Maintain storage area conditions for products of this section in accordance with manufacturer's instructions until installation.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: The Wiremold Company; 60 Woodlawn Street, West Hartford CT 06133-2500; ASD. Tel: (800) 621-0049, Fax: (203) 232-2062.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.
- D. Supply all products specified in this section from a single manufacturer.

2.2 COMPONENTS

- A. Surface Non-Metallic Raceway:
 - 1. Acceptable Product: Wiremold Access 5000 System.

2. Product Description: Three-piece system of rigid polyvinyl chloride (PVC) extrusions, 8 feet (2438 mm) in length with nominal 0.09 inch (2.38 mm) wall thickness, total 5.78 inches (146.8 mm) high by 0.96 inches (24.4 mm) deep, consisting of the following:
 - a. Base: Smooth finish, neutral color extruded channel, with integral continuous barrier separating channel interior into two wiring channels, and with continuous integral ribs in top channel to receive mounting device brackets.
 - b. Cover: Extruded flat profile, with continuous integral flanges at each edge for snap on fit to open face of base; sight-exposed surface of cover finished to match trim cover.
 - c. Trim cover: Extruded cove profile, with continuous integral flanges at each edge for snap on fit to top of base; sight-exposed surface of trim cover finished and coordinated with cover.
- B. Corner Units:
1. Supply factory-formed cover and trim cover units for internal and external corners of indicated raceway layouts:
 - a. External corner units: Minimum 2-1/2 inch (63.5 mm) leg length.
 - b. Internal corner units: Minimum 1-5/8 inch (31.7 mm) leg length.
 2. Finish corner units to compliment linear cover and trim cover units.
- C. Fittings:
1. Supply factory-formed fittings specified in manufacturer's product data for indicated configurations and service requirements, and as follows:
 - a. Base coupling and cover clip for each vertical joint between cover unit sections, including corner units.
 - b. Base coupling and internal wire guard for each vertical joint between cover unit sections, including corner units.
 - c. One wire clip of each size for every 2 linear feet (609 mm) of indicated base configuration.
 2. Finish: White.
 3. Finish: Brown.
- D. Surface Non-Metallic Raceway:
1. Acceptable Product: Wiremold 5400 System.

2. Product Description: Two-piece system of rigid polyvinyl chloride (PVC) extrusions, 8 feet (2438 mm) in length with nominal 0.10 inch (2.5 mm) wall thickness, total 5-1/2 inches (139.7 mm) high by 1-3/4 inches (44.4 mm) deep, consisting of the following:
 - a. Base: Smooth finish, ivory or white color extruded channel, with integral continuous barrier separating channel interior into two wiring channels of equal width.
 - b. Base: Smooth finish, ivory or white color extruded channel, with integral continuous barriers separating channel interior into three wiring channels of 1/2, 1/4, and 1/4 of full channel width, removable for conversion to dual wiring channel of 1/2 and 1/2 width.
 - c. Cover: Smooth finish, ivory or white color extruded flat profile, with continuous integral flanges at each edge for snap on fit to open face of base.

- E. Fittings: Supply factory-formed fittings specified in manufacturer's product data for indicated configurations and service requirements, and as follows:
 1. Cover clip for each vertical joint between cover unit sections.
 2. One wire clip for every 2 linear feet (609 mm) of indicated base configuration.
 3. One section of replacement divider fitting for every 8 linear feet of indicated base configuration.
 4. Communications Fittings: Wiremold Activatē Connectivity Series modular device plates; smooth finish.

- F. Surface Non-Metallic Raceway:
 1. Acceptable Product: Wiremold 5500 System.
 2. Product Description: Two-piece system of rigid polyvinyl chloride (PVC) extrusions, 8 feet (2438 mm) in length with nominal 0.10 inch (2.5 mm) wall thickness, total 6-11/16 inches (139.7 mm) high by 1-3/4 inches (44.4 mm) deep, consisting of the following:
 - a. Non-Divided Base: Smooth finish, ivory or white color extruded channel, with two integral continuous projections, equally spaced within channel width, to receive replacement divider fitting..

- b. Divided Base: Smooth finish, ivory or white color extruded channel, with integral continuous barriers separating channel interior into three wiring channels, each 1/3 of full channel width, removable for conversion to dual or single wiring channel.
 - c. Cover: Smooth finish, ivory or white color extruded flat profile, with continuous integral flanges at each edge for snap on fit to open face of base.

- G. Fittings: Supply factory-formed fittings specified in manufacturer's product data for indicated configurations and service requirements, and as follows:
 - 1. Cover clip for each vertical joint between cover unit sections.
 - 2. One wire clip for every 2 linear feet (609 mm) of indicated base configuration.
 - 3. Two sections of replacement divider fitting for every 8 linear feet (2438 mm) of indicated base configuration.

- H. Device Brackets and Plates:
 - 1. Factory-formed brackets and plates allowing installation of indicated power, data, and communications devices, both single-gang and two-gang, either vertically or horizontally in raceways.
 - 2. Color: _____.

- I. Cover Brackets and Face Plates:
 - 1. Plastic device mounting brackets and trim plates allowing installation of indicated power, data, and communications devices horizontally in raceways; trim cover sized to overlap device cut-out in raceway, concealing seams.
 - 2. Color: _____.

- J. Communications Devices and Accessories:
 - 1. Communications devices: Wiremold Activate[®] Connectivity Series factory-fabricated modular connectivity outlets, modular inserts, and other devices for indicated configurations and service requirements, including, but not limited to, the following systems:
 - a. UTP, including Category 5.
 - b. STP; 150-ohm.
 - c. Fiber Optics.
 - d. Coaxial.
 - 2. Mounting face plates and bezels: Color _____.
 - 3. Identification accessories, including the following:

- a. Pre-printed station and port identification labels.
 - b. Snap-in icon buttons.
 - c. Write-on station identification labels.
- K. Electrical Devices:
- 1. Factory-fabricated devices for indicated configurations and service requirements.
 - 2. Finish of sight-exposed components: Color _____.
- L. Electrical devices, and wiring for electrical devices, are specified in sections of Division 16.
- M. Fasteners: Types specified in manufacturer's installation instructions for project conditions.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Substrates are prepared to receive products specified in this section.

3.2 INSTALLATION

- A. Install components of raceway system in accordance with shop drawings and manufacturer's installation instructions.
- B. Installation of electrical devices, and wiring of electrical devices, is specified in a Division 16 section.
- C. Installation of wiring for communications devices is specified in a Division 16 section.

END OF SECTION